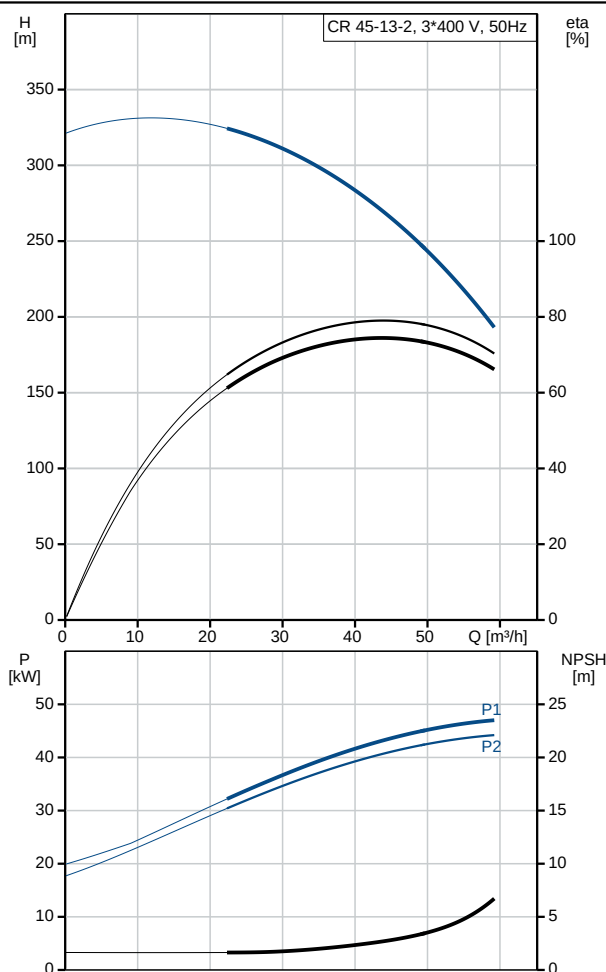


Qty.	Description
1	CR 45-13-2A-F-A-V-HQQV  Note! Product picture may differ from actual product Product No.: 96122845 Vertical, multistage centrifugal pump with inlet and outlet ports on same the level (inline). The pump head and base are in cast iron – all other wetted parts are in stainless steel. A cartridge shaft seal ensures high reliability, safe handling, and easy access and service. Power transmission is via a rigid split coupling. Pipe connection is via DIN flanges. The pump is fitted with a 3-phase, fan-cooled asynchronous motor. Controls: Frequency converter: NONE Liquid: Pumped liquid: Water Liquid temperature range: -20 .. 90 °C Selected liquid temperature: 20 °C Density at selected liquid temperature: 998.2 kg/m³ Technical: Pump speed on which pump data are based: 2960 rpm Rated flow: 45 m³/h Rated head: 262.6 m Pump orientation: Vertical Shaft seal arrangement: Single Code for shaft seal: HQQV Approvals on nameplate: CE, EAC Curve tolerance: ISO9906:2012 3B Materials: Base: Cast iron EN 1563 EN-GJS-500-7 ASTM A536 80-55-06 Impeller: Stainless steel EN 1.4301 AISI 304 Bearing: SIC Support bearing: Graflon Installation: Maximum ambient temperature: 55 °C Maximum operating pressure: 33 bar

Qty.	Description
	Max pressure at stated temp: 33 bar / 90 °C 33 bar / -20 °C Type of connection: DIN Size of inlet connection: DN 80 Size of outlet connection: DN 80 Pressure rating for pipe connection: PN 40 Flange size for motor: FF400 Electrical data: Motor standard: IEC Motor type: SIEMENS IE Efficiency class: IE3 Rated power - P2: 45 kW Power (P2) required by pump: 45 kW Mains frequency: 50 Hz Rated voltage: 3 x 380-420D/660-725Y V Rated current: 81,0-74,0/47,0-43,0 A Starting current: 690-690 % Cos phi - power factor: 0.89 Rated speed: 2960 rpm Efficiency: IE3 94,0% Motor efficiency at full load: 94.0-94.0 % Motor efficiency at 3/4 load: 94.5-94.5 % Motor efficiency at 1/2 load: 94.4-94.4 % Number of poles: 2 Enclosure class (IEC 34-5): 55 Dust/Jetting Insulation class (IEC 85): F Motor No: 81U15336 Others: Minimum efficiency index, MEI η_{me}: 0.70 Net weight: 464 kg Gross weight: 566 kg Shipping volume: 1.24 m³ Country of origin: GB Custom tariff no.: 84137075

Description	Value
General information:	
Product name:	CR 45-13-2A-F-A-V-HQQV
Product No:	96122845
EAN number:	5700396688893
Technical:	
Pump speed on which pump data are based:	2960 rpm
Rated flow:	45 m³/h
Rated head:	262.6 m
Head max:	321 m
Stages:	13
Impellers:	13
Number of reduced-diameter impellers:	2
Low NPSH:	N
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Code for shaft seal:	HQQV
Approvals on nameplate:	CE, EAC
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	B
Materials:	
Base:	Cast iron EN 1563 EN-GJS-500-7
Impeller:	ASTM A536 80-55-06 Stainless steel EN 1.4301 AISI 304
Material code:	A
Code for rubber:	V
Bearing:	SIC
Support bearing:	Graflon
Installation:	
Maximum ambient temperature:	55 °C
Maximum operating pressure:	33 bar
Max pressure at stated temp:	33 bar / 90 °C 33 bar / -20 °C
Type of connection:	DIN
Size of inlet connection:	DN 80
Size of outlet connection:	DN 80
Pressure rating for pipe connection:	PN 40
Flange size for motor:	FF400
Connect code:	F
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-20 .. 90 °C
Selected liquid temperature:	20 °C
Density at selected liquid temperature:	998.2 kg/m³
Electrical data:	
Motor standard:	IEC
Motor type:	SIEMENS
IE Efficiency class:	IE3
Rated power - P2:	45 kW
Power (P2) required by pump:	45 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 380-420D/660-725Y V





Company name:

Created by:

Phone:

Date:

08/05/2019

Description	Value
Rated current:	81,0-74,0/47,0-43,0 A
Starting current:	690-690 %
Cos phi - power factor:	0.89
Rated speed:	2960 rpm
Efficiency:	IE3 94,0%
Motor efficiency at full load:	94.0-94.0 %
Motor efficiency at 3/4 load:	94.5-94.5 %
Motor efficiency at 1/2 load:	94.4-94.4 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Motor protec:	PTC
Motor No:	81U15336
Controls:	
Frequency converter:	NONE
Others:	
Minimum efficiency index, MEI $\eta_{\%}$:	0.70
Net weight:	464 kg
Gross weight:	566 kg
Shipping volume:	1.24 m ³
Country of origin:	GB
Custom tariff no.:	84137075